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I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, D.C. 20231, ON THE DATE INDICATED BELOW.

JO-ANN F SYLVIA
NAME OF PERSON SIGNING

SIGNATURE 6/8/01 DATE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of	
Strobel et al.	Examiner: H. Tsai
Title: METHOD FOR MAKING DIE BOARDS, AND MATERIALS AND APPARATUS FOR PRACTICING THE METHOD	Group Art Unit: 3722
Serial No.: 09/558,575	(Our Docket No. P48-1229-1)
Filed: April 26, 2000	

Hartford, Connecticut, June 8, 2001

Box: AF
Assistant Commissioner for Patents
Washington, DC 20231

APPEAL BRIEF

S I R:

This appeal is taken from the Final Office Action mailed January 30, 2001 in which claims 30-32 of the above-referenced application were finally rejected under 35 U.S.C. § 102(b).

REAL PARTY IN INTEREST

The real party in interest in the above-referenced patent application is:

GERBER SCIENTIFIC PRODUCTS, INC.
151 BATSON DRIVE
MANCHESTER, CT 06040

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences of which Applicants are aware regarding the above-referenced application.

STATUS OF CLAIMS

Claims 30-32 are pending in this application. Claims 30-32 stand rejected under 35 U.S.C. § 102(b). All rejected claims are presented to the Board in this Appeal.

STATUS OF AMENDMENTS

No amendments have been filed subsequent to the Final Office Action of January 30, 2001.

SUMMARY OF INVENTION

The present invention resides in a rotary cutting tool (148, 150, 152) for generating slots (16, 116) in die boards (10, 110). The rotary cutting tool (148, 150, 152) includes a first cutting portion (154) defining a first outer diameter (d1) and a second cutting portion (156) defining a second outer diameter (d2) extending from and coaxial with the first cutting portion. The second cutting portion (156) defines a generally cylindrical, outer peripheral surface. Each of the first and second cutting portions (154, 156) are defined in part by at least two helical cutting flutes (160) extending longitudinally. Preferably, the first cutting portion (154) defines a tapered section (158) having a diameter that progressively decreases from the first outer diameter (d1) to the second outer diameter (d2). In this instance, the second cutting portion (156) generates a slot in a die board having a width adapted for receiving and grippingly retaining a die board rule, and the first cutting portion (154) is larger in diameter relative to the second cutting portion to provide strength and stability to the rotary cutting tool during a cutting operation. The first and second cutting portions (154, 156) preferably are each cylindrical.

ISSUES

The issue to be resolved is whether claims 30-32 are anticipated under 35 U.S.C. § 102(b) by Arnold (U.S. Pat. No. 4,662,803).

GROUPING OF CLAIMS

Each grouping of claims associated with a claim rejection stand or fall together.

ARGUMENT

§ 102(b) Rejection

For prior art to anticipate under § 102, every element of the claimed invention must be identically disclosed in a single reference. C.R. Bard, Inc. v. M3 Sys., Inc., 48 U.S.P.Q. 2D 1225, 1230 (Fed. Cir. 1998), *rehearing denied & suggestion for rehearing in banc declined*, 161 F. 3d 1380 (Fed. Cir. 1998); Rockwell Int'l Corp. v. United States, 47 U.S.P.Q. 2D 1027, 1031 (Fed. Cir. 1998) ("Anticipation under 35 U.S.C. § 102 requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention."); Gechter v. Davidson, 43 U.S.P.Q. 2d 1030, 1032 (Fed. Cir. 1997) ("Under 35 U.S.C. § 102, every limitation of a claim must identically appear in a single prior art reference for it to anticipate the claim.").

Arnold is directed to a reamer which enlarges or shapes previously formed holes, but is not used to generate holes. The present invention, on the other hand, is directed to a rotary cutting tool for generating slots in die boards, as recited in independent claim 30. The claimed structure of the rotary cutting tool of the present invention is distinguishable from that of the reamer disclosed in Arnold because of, among other things, the different purposes these tools are used for.

The reamer disclosed in Arnold defines unequally spaced flutes. As shown in Fig. 1, a small diameter, rear portion 18 of the reamer defines four helical cutting flutes 23, 24, 25 and 26 for performing the reaming function (see col. 2, lines 62-66). A relatively large diameter, cylindrical body 42 has a countersink cutter 44 for performing another type of cutting or countersink function. The cylindrical body 42 having the countersink cutter 44 is attached at a second end 22 of the rear portion 18 having the helical flutes (see, col. 3, lines

49-56). As shown in Fig. 1, the countersink cutter 44 defined on the cylindrical body 42 is not helical, but rather is aligned with the longitudinal axis of the reamer. There is no mention in Arnold of any flutes, helical or otherwise, along the constant diameter portion of the cylindrical body 42 that is used for countersinking. In other words, helical flutes are not defined on each of the cutting portions 18 and 42 of the reamer.

The invention as recited in independent claim 30, on the other hand, is directed to a rotary cutting tool having a first cutting portion defining a first outer diameter and a second cutting portion defining a second outer diameter, wherein each of the first and second cutting portions are defined in part by at least two helical cutting flutes extending longitudinally along a respective one of the first and second cutting portions. From claim 32, it can be seen that the first cutting portion has a large diameter relative to the second cutting portion such that the second cutting portion generates a slot in a die board having a width adapted for receiving and grippingly retaining a die board rule, and the first cutting portion is larger in diameter relative to the second cutting portion to provide strength and stability to the rotary cutting tool during a cutting operation.

As generally stated above, for an anticipation rejection to be proper, each and every element or limitation in the rejected claim must be disclosed in the cited prior art reference. Because Arnold does not show, among other things, a rotary cutting tool having a first cutting portion defining a first outer diameter and a second cutting portion defining a second outer diameter, wherein each of the first and second cutting portions are defined in part by at least two helical cutting flutes extending longitudinally, as recited in independent claim 30 of the present invention, it cannot be maintained that claim 30 is anticipated by Arnold. Because claims 31 and 32 each depend from and therefore incorporate by reference the limitations of claim 30, claims 31 and 32 are likewise deemed not anticipated by Arnold for at least the reasons set forth for independent claim 30.

In view of the foregoing, it is respectfully submitted that the rejection of claims 30-32 is not well-founded. Accordingly, Applicants respectfully request this Board to reverse the Examiner's rejection and to allow the application under appeal to issue as a patent.

A check in the amount of $310 is enclosed to cover the fee for filing this Appeal. No additional fees or deficiencies in fees are believed to be owed. However, authorization is hereby given to charge our Deposit Account No. 13-0235 in the event any such fees are owed.

Respectfully submitted,

By Daniel G. Mackas

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APPENDIX

30. A rotary cutting tool for generating slots in die boards comprising:

a first cutting portion defining a first outer diameter and a second cutting portion defining a second outer diameter extending from and coaxial with said first cutting portion;

said second cutting portion defining a generally cylindrical, outer peripheral surface; and wherein

each of said first and second cutting portions are defined in part by at least two helical cutting flutes extending longitudinally.

31. A rotary cutting tool as defined by claim 30 wherein said first cutting portion defines a tapered section having a diameter that progressively decreases from said first outer diameter to said second outer diameter.

32. A rotary cutting tool as defined by claim 30 wherein said first and second cutting portions are each generally cylindrical.